

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/13655

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7	A61K38/46	A61K48/00	A01K67/027	C12N5/10	G01N33/50
	A61P3/04	A61P3/10			

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K A61P C12N G01N A01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, Sequence Search, MEDLINE, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 97/06262 A (INCYTE PHARMA INC) 20 February 1997 (1997-02-20)</p> <p>page 3, line 2 – line 35 page 16, line 25 – line 40 page 27, line 22 – page 28, line 11 page 29, line 10 – page 30, line 8 page 22, line 30 – page 24, line 4 claims</p> <p>-----</p> <p>WO 99/14340 A (INCYTE PHARMA INC ; CORLEY NEIL C (US); AU YOUNG JANICE (US); GUEGLER) 25 March 1999 (1999-03-25)</p> <p>page 2, line 18 – page 3, line 29 page 23, line 20 – page 32, line 10 claims</p> <p>-----</p> <p style="text-align: center;">-/--</p>	1-15,17, 20,21, 23,24,33
X		1-17,20, 21,28, 30,33

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the International search

19 May 2004

Date of mailing of the International search report

02/06/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>KADAMBI VIVEK J ET AL: "Impaired ventricular relaxation resulting from cardiac-specific overexpression of a human prenylated protein tyrosine phosphatase" <i>CIRCULATION</i>, vol. 102, no. 18 Supplement, 31 October 2000 (2000-10-31), page II.268, XP001181430</p> <p>& ABSTRACTS FROM AMERICAN HEART ASSOCIATION SCIENTIFIC SESSIONS 2000; NEW ORLEANS, LOUISIANA, USA; NOVEMBER 12-15, 2000</p> <p>ISSN: 0009-7322</p> <p>abstract</p> <p>-----</p>	18,19,32
X	<p>HOIT BRIAN D ET AL: "Restrictive cardiomyopathy in transgenic mice with cardiac-specific overexpression of a tyrosine phosphatase, PRL-3" <i>CIRCULATION</i>, vol. 104, no. 17 Supplement, 23 October 2001 (2001-10-23), page II.164, XP001181429</p> <p>& SCIENTIFIC SESSIONS 2001 OF THE AMERICAN HEART ASSOCIATION; ANAHEIM, CALIFORNIA, USA; NOVEMBER 11-14, 2001</p> <p>ISSN: 0009-7322</p> <p>abstract</p> <p>-----</p>	18,19,32

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 25-27 (completely), 1,16,17,33 (partially)

Present claims 1,16,17,25-27,33 relate to agents defined only by reference to a desirable characteristic or property, namely to modulators/effectors of a PRL-1 homologous protein or nucleic acid encoding such protein or to agents identified by the method of claims 22 - 24 .

Those claims are so-called "reach-through" claims, wherein the protection is sought for embodiments not yet identified. Although the claims cover all agents having those characteristics or properties, the application does not provide any example of such agents, contrary to the requirements of support and disclosure in the sense of Article 5 and 6 PCT. The fact that any compound could be screened does not overcome this objection, as the skilled person would not have knowledge beforehand as to whether it would fall within the scope claimed. Undue experimentation would be required to randomly screen compounds for those activities.

The non-compliance with the substantive provisions is to such an extent that no meaningful search of whole claims 25-27 and parts of claims 1,16,17,33 concerning said modulator/effector could be carried out (Article 17(2) PCT and PCT Guidelines 9.26). The search of claims 1,16,17,33 was restricted to the subject-matter which is considered to be clear and supported by the description, namely to the parts concerning human PRL-1 homologous proteins as defined in Table 2.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 25-27 (completely), 1, 16, 17, 33 (partially) because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9706262	A	20-02-1997	AU 6688696 A WO 9706262 A1	05-03-1997 20-02-1997
WO 9914340	A	25-03-1999	AU 9500798 A CA 2303227 A1 EP 1015604 A1 JP 2002503442 T WO 9914340 A1 US 2003077802 A1	05-04-1999 25-03-1999 05-07-2000 05-02-2002 25-03-1999 24-04-2003